

### Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims:

- 1-2. (cancelled)
3. (currently amended) Method to counteract the loss of cellular differentiation and to treat cell proliferation in tumor pathologies comprising the step of administering to a subject in need an effective amount of at least a compound selected from the group consisting of 5, 11-dihydro-6H-dipyrido (3, 2-b:2', 3'-e) (1, 4) diazepine class of compounds, nevirapine, efavirenz, delavirdine, and corresponding salts of nevirapine, efavirenz, and delavirdine, wherein said tumor pathologies are selected from the group consisting of leukemia, carcinomas ~~epithelial tumors~~, tumors of the nervous system, fibro- and osteo-sarcomas.
4. (previously presented) The method according to claim 3 wherein the compound reconverts the differentiated cells into phenotypically normal cells.
5. (currently amended) The method according to claim 3 wherein said carcinomas ~~epithelial tumors~~ are selected from the group of teratocarcinoma, colon carcinoma, breast carcinoma, adenocarcinoma, and hepatoma.
6. (withdrawn) The method according to claim 3 wherein the compound is selected from the 5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepine class of compounds.
7. (previously presented) The method according to claim 3 wherein the compound is selected from the group consisting of: nevirapine, efavirenz, delavirdine, and corresponding salts thereof.
8. (previously presented) The method according to claim 3 wherein the compound is present in a pharmaceutical composition that further comprises one or more carriers and/or diluents and/or solvents and/or excipients suitable for oral, intravenous, intramuscular or hypodermic injection administration.
9. (previously presented) The method according to any one of claims 3-8 wherein the pharmaceutical compositions are in the form of pills, suspensions or solutions.
- 10-11. (cancelled)

12. (previously presented) The method according to claim 3 wherein the tumor of the nervous system is glioma.

13. (previously presented) The method according to claim 3, wherein the leukemia is acute myeloid leukemia.